	Application No.	Applicant(s)
Notice of Allowability	09/818,788	ABDO ET AL.
	Examiner	Art Unit	
	Joseph D. Manoskey	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 9/2/05*.

2. ☒ The allowed claim(s) is/are *5-10, 18-21, 23-32 and 36-42*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

Allowable Subject Matter

1.   Claims 5-10, 18-21, 23-32 and 36-42 allowed.

Response to Arguments

2.   Applicant's arguments, see pages 7-11 of amendment, filed 2 September 2005, with respect to claims 29-32 and 36 have been fully considered and are persuasive. The 35 U.S.C. 102(e) rejection of claims 29-32 and 36 has been withdrawn.

3.   Applicant's arguments, see pages 7-11 of amendment, filed 2 September 2005, with respect to claim 37 have been fully considered and are persuasive. The objection of claim 37 has been withdrawn.

Reasons for Allowance

4.   The following is an examiner's statement of reasons for allowance:

5.   Claims 5-10 are allowed because the prior art does not teach "if a request type of the transaction matches a trigger condition, generating a data request, and generating a harassing bus transaction based on the data request."

6.   Claims 18 and 19 are allowed because the prior art does not teach "counting a

number of external bus cycles that occur without onset of a new transaction on the

external bus, determining if the number meets a threshold value, and if so, generating a

harassing transaction on the external bus."

7.   Claims 20, 21, and 23 are allowed because the prior art does not teach "a

validation functional unit block (FUB) having an input coupled to the external bus

interface of the data request pipeline, the validation FUB to operate in the domain of the

first clock, the validation FUB further comprising: a transaction latch coupled to the

external bus interface, and a request library coupled to the transaction latch and having

an output coupled to the data request pipeline, to store transaction request types

according to an external bus protocol."

8.   Claims 24-26 are allowed because the prior art does not teach "a bus

sequencing unit coupled to the processor core and an external bus, the bus sequencing

unit comprising: an arbiter to receive a first data request, a cache memory to store data,

and a transaction queue coupled to the arbiter and the cache memory to process the

first data request, and a validation functional unit block (FUB) coupled to the bus

sequencing unit and the external bus, the validation FUB to receive the first data

request from the arbiter to generate a second data request if the first data request

matches a triggering condition."

9.   Claims 27, 28, 38, and 39 are allowed because the prior art does not teach "a

bus sequencing unit coupled to the processor core and an external bus, the bus

sequencing unit further comprising: an arbiter to receive a first data request, a cache

memory to output a hit/miss signal in response to the first data request, and a

transaction queue coupled to the arbiter and the cache memory to process the first data

request, and a validation functional unit block IFUBI coupled to the bus sequencing unit

and the external bus, the validation FUB to receive the hit/miss signal from the cache

memory to generate a second data request if the hit/miss signal matches a triggering

condition."

10.   Claims 29-32 are allowed because the prior art does not teach "in response to a

the detected transaction, issuing a read request in a second transaction on the external

bus, the read request directed to the address read from said first transaction from the

external bus."

11.   Claims 36 and 37 are allowed because the prior art does not teach "storing a

request type in a register, observing a transaction on an external bus, and if the request

type of the external bus transaction matches the request type stored in the register,

generating a data request on the external bus."

12.   Claims 40-42 are allowed because the prior art does not teach "means for

forming a second data request based on the first data address if said means for

determining determines that the trigger condition is satisfied, and means for posting the

second data request to the data bus as a harassing transaction."

13.   Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph D. Manoskey whose telephone number is (571)

272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JDM
September 15, 2005

ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100